

COMPLETE AND GREEN STREETS POLICY

NOACA Transportation Subcommittee

June 21, 2019

ACTION REQUESTED

No action is being requested. This item is for information and presentation.

PREVIOUS ACTION

Presented to the Policy Committee and Transportation Subcommittee

Complete Streets: **BACKGROUND**

Rural



Urban



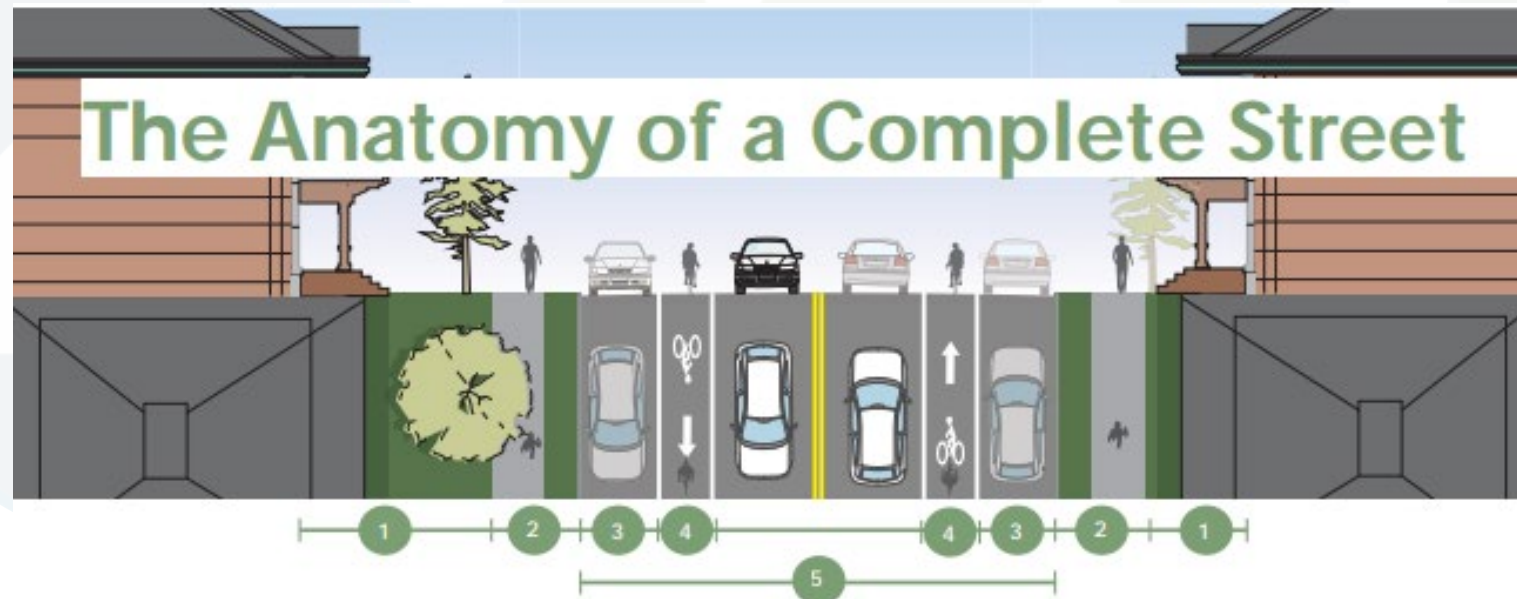
Suburban



Urban



BACKGROUND



1 PRIVATE FRONTAGE

The Private Frontage is the area between the building facades and the lot line. The private frontage presents many architectural and landscape variations, which depends on the context.

2 PUBLIC REALM

The Public Realm is defined by the public space located between the private lot line and the street edge. It is comprised of various physical design elements, including:

- The Walking Zone
- The Furnishing Zone
- The Street Edge Zone

3 VARIABLE CURBSIDE USES

Variable curbside uses include the storage of private automobiles, which can also protect pedestrians and bicyclists from moving traffic, on-street bicycle parking, parklets, bus lanes, and other public uses.

4 BIKEWAYS

Bicycle Facilities can be implemented in a variety of ways depending on context. This section shows on-street bicycle lanes. Streets should always aim to be multimodal in various intensities and configurations.

5 TRAVELWAY

The Travelway includes the space between the curbs, or the outside edge of pavement in more rural conditions. It may be segmented by landscaping, variable curbside uses, medians, transit facilities, bicycle facilities etc.

BACKGROUND

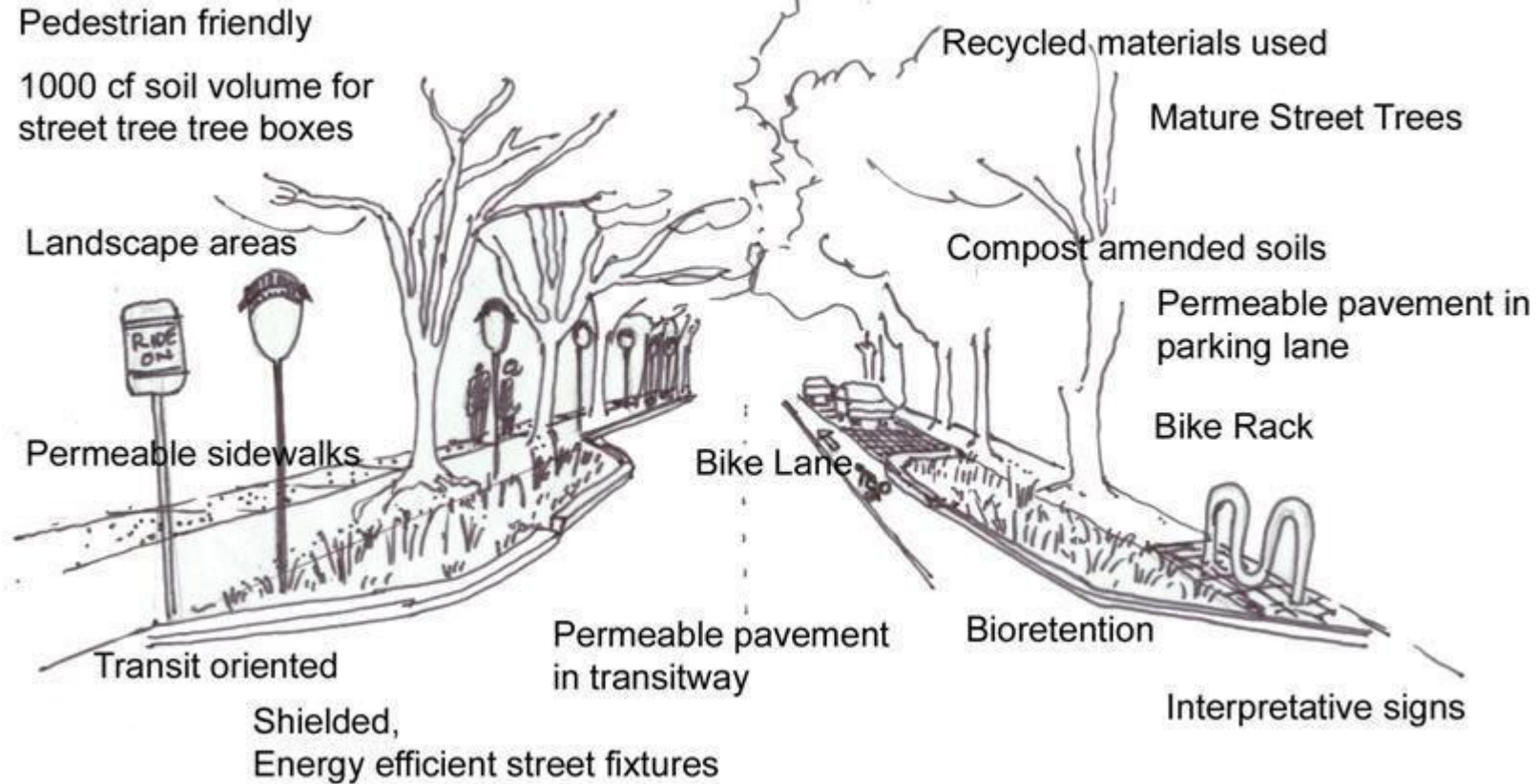
Green Streets:

Green Streets reflect the transportation policy and design approach that minimizes environmental impact by focusing on efforts to retain, treat and eliminate runoff at the source using green infrastructure applications. Green infrastructure helps replicate natural hydrologic functions like storage, detention, infiltration, filtration, evaporation, transpiration, and uptake by plants, and can improve water quality and reduce runoff volumes. These natural functions are often lost in transportation projects where impervious road surfaces prevent rain water from soaking into the ground.



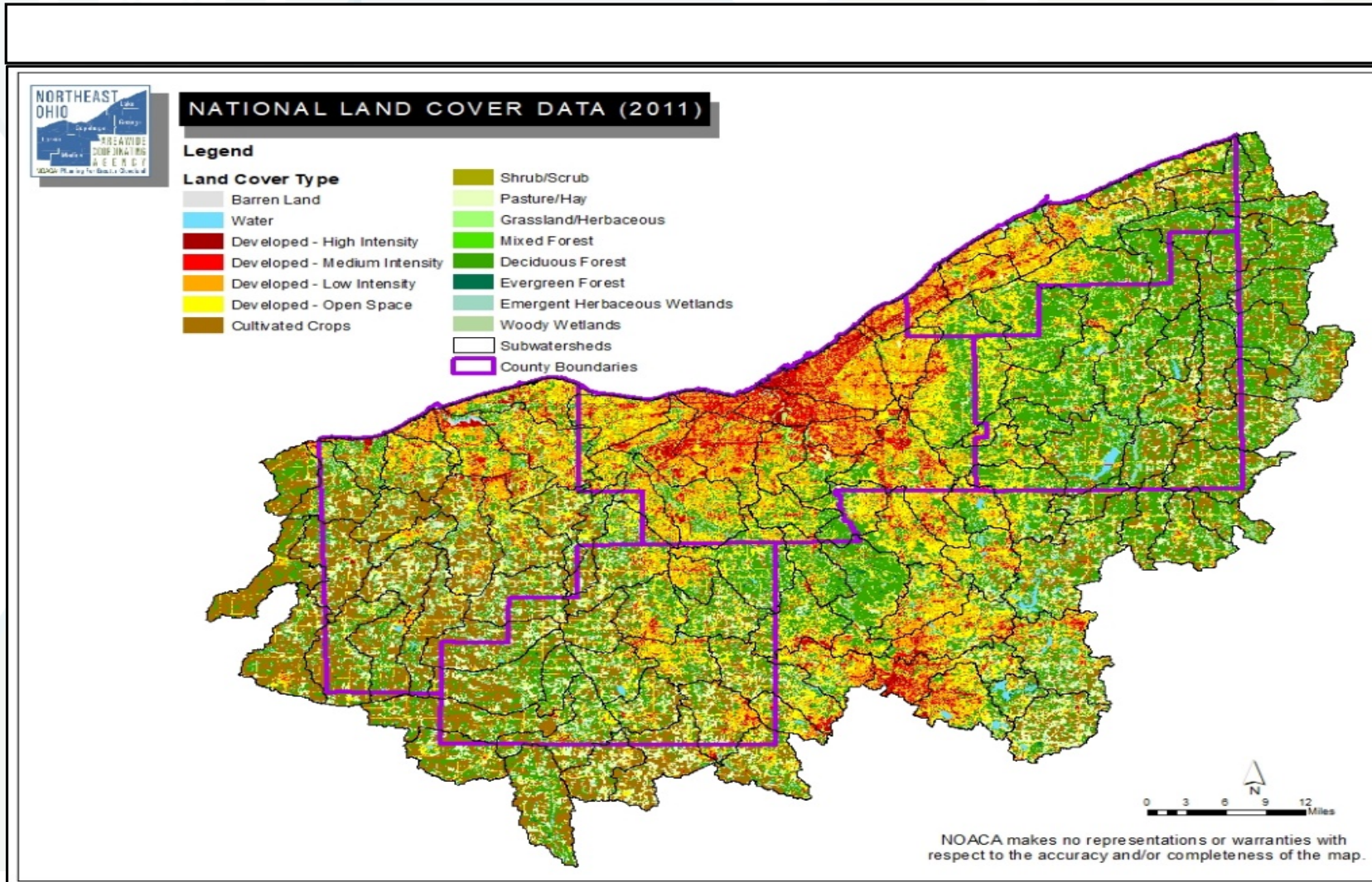
BACKGROUND

Anatomy of a Green Street



Source: USEPA

BACKGROUND



Impervious Surface	
COUNTY	% IMPERVIOUS
Cuyahoga	38.3%
Geauga	5.5%
Lake	19.8%
Lorain	11.5%
Medina	8.0%

BACKGROUND

Local Examples of Complete and Green Streets Policies

- City of Cleveland
- City of Cleveland Heights
- Cuyahoga County
- NEORSD
- City of Lorain



Green Infrastructure Policy

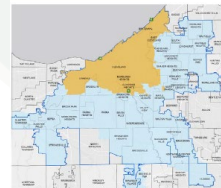
The Northeast Ohio Regional Sewer District recognizes that Green Infrastructure plays an important role in stormwater management, water quality, and improving the quality of life in the communities we serve.

We design, fund, build, and maintain Green Infrastructure projects that promote smart stormwater solutions. We developed and are implementing a policy to pursue opportunities across our service area and advocate for strategic, cost-effective Green Infrastructure that protects, preserves, enhances, and restores the natural hydrologic function of our region's watersheds.

In addition, we are seeking to maximize co-benefits provided by Green Infrastructure, including opportunities to expand urban natural areas, enhance air quality, and improve quality of life in Northeast Ohio.

We define Green Infrastructure as:

stormwater source control measures that store, filter, infiltrate, harvest, and reuse or evapo-transpire stormwater to increase resiliency of infrastructure by reducing stress on wet-weather drainage and collection systems, which increase co-benefits in support of healthy environments and strong communities.



The Sewer District services 62 communities and more than one million people in a 350-square-mile tributary area.

118,600,000
Total gallons of stormwater managed by Sewer District-implemented GI projects

16,361,797
Projected gallons per year of stormwater controlled through Sewer District-funded GI projects

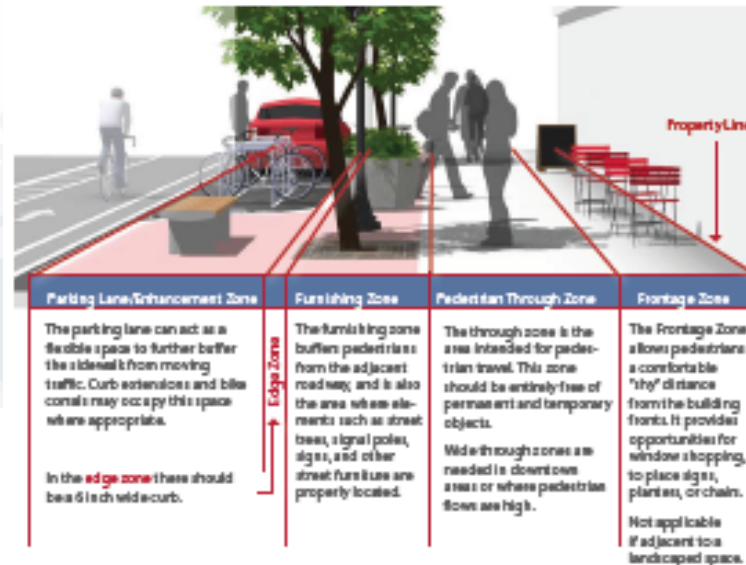
\$118,560,417
Total dollars spent on Sewer District-implemented or -funded GI projects:
\$4,000,000 (Cleveland) + \$10,000,000 (Cleveland Heights) + \$10,000,000 (Cuyahoga County) + \$10,000,000 (Lorain) + \$10,000,000 (Medina) + \$10,000,000 (Shaker Square) + \$10,000,000 (University Heights) + \$10,000,000 (Westside) + \$10,000,000 (Wentworth) + \$10,000,000 (Winton Woods)



BACKGROUND

City of Cleveland

- **Ordinance 789-11**
 - To provide for the consideration of Complete and Green Street elements in all construction projects within the public right of way
- **Typologies Plan 2013**
 - To provide a framework and guide for Cleveland to use in its efforts towards developing a network of Complete and Green Streets throughout the City



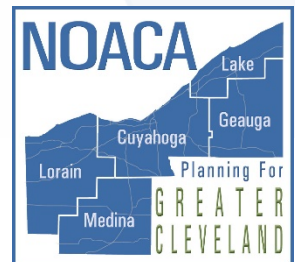
BACKGROUND

City of Cleveland Heights

- **Resolution No. 37-2018**
 - Complete and Green Streets are roadways designed and operated to safely and comfortably accommodate users of all ages and abilities, including cyclists, pedestrians, transit riders, elderly, delivery and service personnel, and emergency responders; and to reduce, accommodate and slow stormwater runoff as part of a comprehensive stormwater management system.



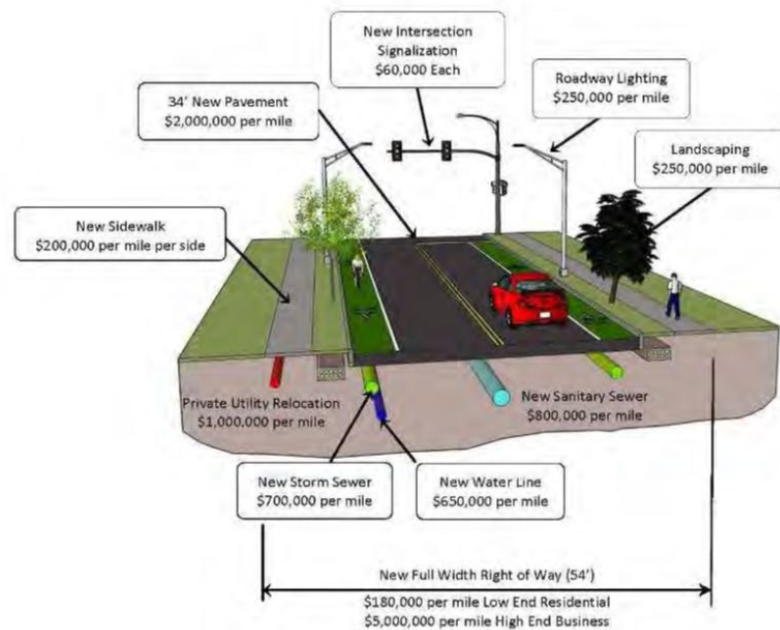
Highest ranked 2018 complete street policy by Smart Growth America and National Complete Streets Coalition!



BACKGROUND

Cuyahoga County:

- **Complete Streets Toolkit**
 - The Toolkit is intended as a “how to” manual for engineers, planners, and local elected officials



BACKGROUND

NEORSD:

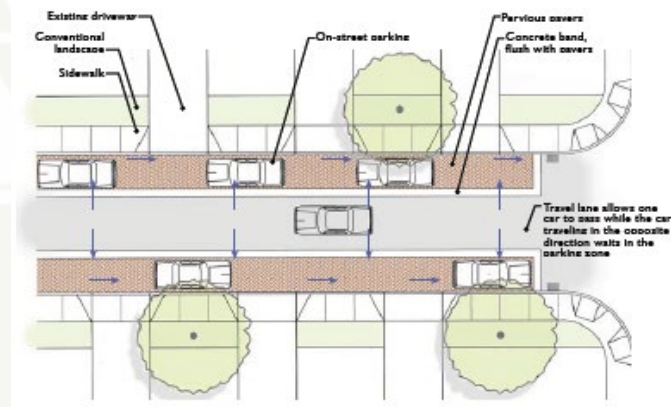
Northeast Ohio Regional Sewer District Green Infrastructure Policy

We actively pursue opportunities across our program areas to advocate for strategic and cost-effective implementation and maintenance of green infrastructure technologies and innovations that protect, preserve, enhance and restore the natural hydrologic function of our region's watersheds. In addition, we seek to maximize the co-benefits provided by green infrastructure projects including opportunities to expand urban natural areas, enhance air quality, and improve quality of life in Northeast Ohio.

BACKGROUND

Benefits of Complete and Green Streets

- Increase Safety
- Improve Health
- Improve Air Quality
- Improve Water Quality
- Economic Revitalization
- Lower Transportation Costs
- Create livable Communities
- Create Equity
- Reduce Traffic Congestion



BACKGROUND

Why Develop a Stand Alone Complete and Green Streets Policy

- To change practice, integrating the needs of all road users into everyday transportation planning and design practices
- To gradually create a complete network of streets that serve all users
- To save money: in the long run, retrofit projects always cost more than getting it right the first time
- To apply solutions across the region to address systematic inequities
- To create fast, low-cost, and high-impact changes in the region
- To implement NOACA's Regional Strategic Plan

BACKGROUND

Draft Complete and Green Streets Policy

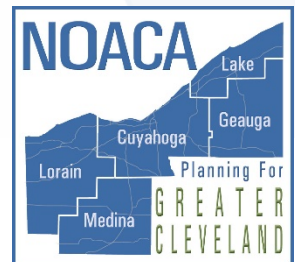
- All projects requesting inclusion to the LRTP and/or TIP will be reviewed against this policy for opportunities to expand complete and green streets in the NOACA region.
- All projects requesting NOACA administered funds shall be required to adhere to this policy and are therefore eligible for NOACA funding participation to implement complete and green street recommendations.



BACKGROUND

Goals of the Draft Complete and Green Streets Policy

- Create a comprehensive, integrated, and connected transportation network that supports sustainable development and provides livable communities.
- Ensure safety, ease of use, and ease of transfer between modes for all users of the transportation system.
- Restore the natural hydrologic function of the region's watersheds.
- Provide flexibility for different types of streets, areas, and users.



BACKGROUND

Requirements

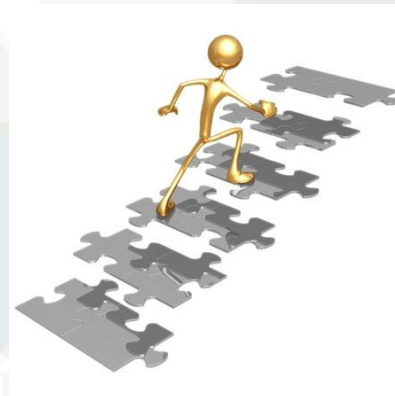
- **Consider all users**
- **Follow accepted design standards**
- **Prioritize safety**
- **Consider green infrastructure during project scoping**

Exceptions

- **Project on low ADT road**
- **Bicyclists and pedestrians prohibited**
- **Extreme topographic constraints**

NEXT STEPS

Subcommittee Input will inform the Policy Committee members as they consider the Complete and Green Streets Policy at the July 2019 meeting





NOACA will **STRENGTHEN** regional cohesion, **PRESERVE** existing infrastructure, and **BUILD** a sustainable multimodal transportation system to **SUPPORT** economic development and **ENHANCE** quality of life in Northeast Ohio.

